

PARAMETERS	HEALTH CANADA RECOMMENDATIONS (2014)	QUEBEC REGULATION DRINKING WATER QUALITY (Q-2,r.40)	DRINKING WATER		
			CONCENTRATION		
			MIN.	AVE.	MAX.
Physical Properties					
pH (units)	6.5 - 8.5	6.5 - 8.5	6.90	7.18	7.40
Turbidity (N.T.U.)	≤1.0	≤5 / ≤1 ²	0.16	0.26	0.48
Biological Characteristics					
			ANNUAL AVERAGE		
Total coliforms (C.F.U./100ml)	>90% ABS ⁴	>90% ABS ⁴	100% ABS		
E. coli (C.F.U./100ml)	ABS ⁴	<1 or ABS ⁴	100% ABS		
Inorganic and Organic Chemical Characteristics (mg/l)					
Antimony (Sb)	≤0.006	≤0.006	0.00009	0.00009	0.00009
Aluminum (Al) **	<0.1	--	0.01445	0.04550	0.17775
Silver (Ag) **	--	--	<0.00003	<0.00003	<0.00003
Arsenic (As)	≤0.010	≤0.010	0.00042	0.00042	0.00042
Barium (Ba)	≤1.0	≤1.0	0.01812	0.01812	0.01812
Bore (B)	≤5	≤5.0	0.036	0.036	0.036
Cadmium (Cd)	≤0.005	≤0.005	<0.00003	<0.00003	<0.00003
Calcium (Ca) **	--	--	13.490	23.382	30.230
Chromium (Cr)	≤0.05	≤0.050	<0.00001	<0.00001	<0.00001
Cobalt (Co) **	--	--	<0.00002	<0.00002	0.00010
Copper (Cu) ⁷	≤1.0 ¹	≤1.0	0.02077	0.02077	0.02077
Cyanides (CN ⁻)	≤0.2	≤0.20	<0.004	<0.004	<0.004
Iron (Fe) **	≤0.3 ¹	--	0.010	0.031	0.220
Fluorides (F)	≤1.5	≤1.50	0.700	0.700	0.700
Magnesium (Mg) **	--	--	3.01	5.32	7.41
Manganese (Mn) **	≤0.05 ¹	--	0.00014	0.00285	0.00980
Mercury (Hg)	≤0.001	≤0.001	<0.00003	<0.00003	<0.00003
Nickel (Ni) **	--	--	0.00038	0.00056	0.00073
Nitrites (NO ₂ -N) + nitrates (NO ₃ -N)	≤1 + ≤10	≤10.0	0.17	0.24	0.30
Lead (Pb) ⁷	≤0.010	≤0.010	0.00040	0.00040	0.00040
Potassium (K) **	--	--	0.84	1.23	1.69
Selenium (Se)	≤0.05	≤0.010	<0.00021	<0.00021	<0.00021
Sodium (Na) **	≤200 ¹	--	6.50	9.80	12.60
Uranium (U)	≤0.02	≤0.020	0.00008	0.00008	0.00008
Zinc (Zn) **	≤5.0 ¹	--	0.00034	0.00101	0.00206

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Carbamates				
Bendiocarb *	-		27	N.D.
Carbaryl *	90		70	N.D.
Carbofuran *	90		70	N.D.
Volatile Organic Compounds (VOC)				
1,1,1,2-Tétrachloroethane	-		-	N.D.
1,1,1-Trichloroethane	-		-	N.D.
1,1,2,2-Tétrachloroethane	-		-	N.D.
1,1,2-Trichloroethane	-		-	N.D.
1,1-Dichloroethane	-		-	N.D.
1,1-Dichloroethylene	14		10	N.D.
1,1-Dichloropropene	-		-	N.D.
1,2,3-Trichlorobenzene	-		-	N.D.
1,2,3-Trichloropropane	-		-	N.D.
1,2,4-Trichlorobenzene	-		-	N.D.
1,2,4-Triméthylbenzene	-		-	N.D.
1,2-Dibromo-3-chloropropane	-		-	N.D.
1,2-Dibromoethane	-		-	N.D.
1,2-Dichlorobenzene	200	3 ¹	150	N.D.
1,2-Dichloroethane	5		5	N.D.
1,2-Dichloropropane	-		-	N.D.
1,3,5-Triméthylbenzene	-		-	N.D.
1,3-Dichlorobenzene	-		-	N.D.
1,3-Dichloropropane	-		-	N.D.
1,4-Dichlorobenzene	5	1 ¹	5	N.D.
1-Chlorobutane	-		-	N.D.
1-Propene,3-chloro	-		-	N.D.
2,2-Dichloropropane	-		-	N.D.
2-Butanone	-		-	N.D.
2-Chlorotoluene	-		-	N.D.
2-Nitropropane	-		-	N.D.
4-Chlorotoluene	-		-	N.D.
4-Isopropyltoluene	-		-	N.D.
Acrylonitrile	-		-	N.D.
Benzene	5		0.5	N.D.
Bromobenzene	-		-	N.D.
Bromochloromethane	-		-	N.D.
Bromoform	-		See Note 3	N.D.
Bromodichloromethane	-		See Note 3	11.04
Bromomethane	-		-	N.D.
Chloroacetonitrile	-		-	N.D.
Chlorobenzene	80	30 ¹	60	N.D.
Chlorodibromomethane	-		See Note 3	2.38
Chloroethane	-		-	N.D.

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Volatile Organic Compounds (VOC)				
Chloroform	-		See Note 3	63.85
Chloromethane	-		-	N.D.
Vinyl chloride	2		2	N.D.
cis-1,2-Dichloroethylene	-		-	N.D.
cis-1,3-Dichloropropene	-		-	N.D.
Dibromomethane	-		-	N.D.
Dichlorodifluoromethane	-		-	N.D.
Dichloromethane	50		50	N.D.
Diethylether	-		-	N.D.
Carbon disulfide	-		-	N.D.
Ethylbenzene	140	1.6 ¹	-	N.D.
Hexachlorobutadiene	-		-	N.D.
Hexachloroethane	-		-	N.D.
Isopropylbenzene	-		-	N.D.
Methacrylonitrile	-		-	N.D.
Methyl acrylate	-		-	N.D.
Methyl methacrylate	-		-	N.D.
MTBE(methyl tert-butyl ether)	-	15 ¹	-	N.D.
m-Xylene + p-Xylene + o-Xylene	90	200 ¹	-	N.D.
Naphthalene	-		-	N.D.
n-Butylbenzene	-		-	N.D.
n-Propylbenzene	-		-	N.D.
Propionitrile	-		-	N.D.
sec-Butylbenzene	-		-	N.D.
Styrene	-		-	N.D.
tert-Butylbenzene	-		-	N.D.
Tetrachloroethylene	30		25	N.D.
Carbon tetrachloride	2		5	N.D.
Tetrahydrofurane	-		-	N.D.
Toluene	60	24 ¹	-	N.D.
trans-1,2-Dichloroethylene	-		-	N.D.
trans-1,3-Dichloropropene	-		-	N.D.
Trans-1,4-dichloro-2-butene	-		-	N.D.
Trichloroethylene	5		5	N.D.
Trichlorofluoromethane	-		-	N.D.
Trihalomethanes (THM) (total) ⁶	-		See Note 3	71.23
Trihalomethanes (THM) (total) – Annual mean concentration	100		80 ³	51.18
Phenolic Compounds				
2,3,4,6-Tetrachlorophenol *	100	1 ¹	70	N.D.
2,4 -Dichlorophenol *	900	0.3 ¹	700	N.D.
2,4,6-Trichlorophenol *	5	2 ¹	5	N.D.
Pentachlorophenol *	60	30 ¹	42	N.D.
Glyphosate				
Glyphosate *	280		210	N.D.

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Polycyclic Aromatic Hydrocarbons (PAH)			
Benzo(a)pyrene *	0.01	0.01	N.D.
Triazine Herbicides			
Atrazine and metabolites *	5	3.5	N.D.
Cyanazine *	-	9	N.D.
Metribuzine *	80	60	N.D.
Simazine *	10	9	N.D.
Chlorophenoxy Acid and Trichloroacetate Pesticides			
2,4-D *	100	70	N.D.
Dicamba *	120	85	N.D.
Dinoseb *	-	7	N.D.
Picloram *	190	140	N.D.
Organochlorine Pesticides			
Metolachlor *	50	35	N.D.
Methoxychlor *	-	700	N.D.
Trifluralin *	45	35	N.D.
Organophosphorus Pesticides			
Azinphos-methyl *	20	17	N.D.
Chlorpyrifos *	90	70	N.D.
Diazinon *	20	14	N.D.
Dimethoate *	20	14	N.D.
Diuron *	150	110	N.D.
Malathion *	190	140	N.D.
Parathion *	-	35	N.D.
Phorate *	2	1.4	N.D.
Terbufos *	1	0.5	N.D.
Others			
Bromoxynil *	5	3.5	N.D.
Methyl-Diclofop *	9	7	N.D.
Diquat *	70	50	N.D.
Paraquat *	10	7	N.D.

- *: Analyzed by an outside accredited laboratory.
- ** : At the exit of water treatment plant.
- N.D.: Not detected, lower than the detection limit method.
- D.: Detected, but cannot determine quantity.

Notes:

- 1: Esthetical or organoleptic reasons.
- 2: Turbidity must be equal or under 5 NTU and must not overpass 1.0 NTU for more than 5 % of total measures taken within 30 days.
- 3: The annual mean concentration of total THM (chloroform, bromodichloromethane, chlorodibromomethane and bromoform) must not exceed 80 µg/L (samples taken at the end of drinking water distribution network).
- 4: ABS: absence.
- 5: Health reasons objectives.
- 6: Maximum obtained for a sampling site.
- 7: Lead and copper level at the center of water distribution network. When water samples are taken from old pipes (before 1970) results are shown below.

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			MIN.	AVE.	MAX.
Copper and Lead (mg/l)					
Copper (Cu)	≤1.0 ¹	≤1.0	0.00454	0.02096	0.04436
Lead (Pb)	≤0.010	≤0.010	0.00009	0.00041	0.00174